

## 4. Note on an Ectoparasite of the Menobranch.

By Prof. R. RAMSAY WRIGHT, F.Z.S.

[Received June 24, 1886.]

The specimens of *Menobranchus* recently brought by me from Toronto and presented to the Society's Collection were infested by an ectoparasitic Trematode, *Sphyrnaria osleri*, mihi, which I first described in the 'Proceedings of the Canadian Institute,' Toronto, 1878. The preserved specimens on which I founded my description enabled me to determine the zoological position of this parasite, which turned out to be an interesting form intermediate between *Gyrodactylus* and *Polystomum*; but I was obliged to postpone any closer investigation into its anatomy till I had access to fresh specimens. I have recently had abundant opportunity of securing these, and I propose shortly to publish elsewhere the results of my studies.

In view of the interest attaching to a certain parallelism between the phylogeny of the Polystomidæ and that of their hosts, I take the present opportunity of referring to the desirability of examining any Urodela which may die in the Reptile House, in case of possible additions to this interesting family of Trematoda.

## 5. Descriptions of some new Species of Rhopalocera from the Solomon Islands. By GERVASE F. MATHEW, Staff-Paymaster Royal Navy, F.L.S., F.Z.S., &amp;c.

[Received June 11, 1886.]

(Plate XXXIV.)

During nearly a four years' Commission on the Australian Station, H.M.S. 'Espiègle' was employed for a greater part of her time among the islands of the Western Pacific, and, upon two occasions, paid brief visits to the Solomon Islands. It is to be regretted that she did not prolong her stay at this charming group, for, from the little seen of them, they appeared to be, entomologically speaking, a perfect paradise, being clothed from water's edge to mountain's peak with the most luxuriant and varied tropical vegetation.

But a serious drawback to collecting was the hostility and treachery of the natives. At many places they were cannibals, and extreme caution had to be exercised when landing—indeed at some places collecting was quite out of the question, as it would have been almost certain death to have ventured into the forest alone. When the natives have had more intercourse with white men it is to be hoped that they will become more civilized, and discontinue their, at present, unpleasant customs. Now they look upon all white men

as their natural enemies, though it is a well-known fact that this state of feeling has to a great extent been created by the white men themselves, who have committed the gravest excesses, and often deliberate murders, while engaged in obtaining recruits for the labour vessels. Until this abominable traffic is abolished it would be unsafe to land at any of the larger islands, except under the escort of a strong and well-armed party. The natives are extremely revengeful, and recollect and treasure up an injury. Their notion of justice is blood for blood, a head for a head, so that in several instances in which white men have been murdered the innocent have suffered for the guilty.

The first place we called at was Ugi, one of the smallest and easternmost islands of the group. Here, fortunately, the natives were all friendly, and an English trader (Mr. Stephens) had resided there for several years, being employed as an agent buying and collecting "copra" for some Sydney firm. There is also a small depôt for coal at this island, and our men-of-war occasionally call, and no labour traffic is permitted, so that the natives at this island were beginning to trust white men.

Ugi is about twenty miles in circumference, for the most part hilly, and covered with dense forest. In the immediate vicinity of the villages there are small clearings where yams, taro (*Caladium esculentum*), and a little sugar is cultivated. Cocoa-nut palms grow all over the island, but especially near the beach, where, in some places, their waving crests form a graceful fringe. Bread-fruit trees are also plentiful near the villages.

We anchored just off Mr. Stephens's hut, at the back of which there was about a couple of acres of ground which had been cleared a year before, but which, at the time of our visit, was overgrown with a dense mass of weeds. Here Butterflies were numerous, especially *Danaï archippus* and a species of *Precis* allied to *P. ida*, *Hypolimnas bolina*, *H. alimena*, &c. A very interesting case of mimicry occurred here. A dark-brown *Euploea* with broad white outer margins (*E. brenchleyi*, Butl.), and *Danaï insolata*, Butl., with markings almost identical, were fairly plentiful; but, to add to the confusion of things, a *Hypolimnas*, which on the wing might have been mistaken for either, was flying with them! Which mimicked which it was difficult to say, or the reason of the mimicry, as all three genera are avoided by birds both in the larva and perfect states.

We remained at Ugi for three days, one of which was devoted to an expedition across the island to a large village on the other side. We breakfasted early and landed at 7 o'clock—a party of five of us, some being armed. On the beach we found a couple of natives, whom we had engaged the previous evening, waiting to show us the way. After leaving Mr. Stephens's hut the trail led through the dense forest, and was so narrow that we were seldom able to walk more than one abreast. Everything at this early hour was reeking with moisture, and in some places the trees were so thick overhead that the path below was enshrouded in gloom. At first no Butterflies were seen, but as the sun gained strength the heavy dew

disappeared, and a few were noticed flying high among the branches and quite out of reach. This was very tantalizing, and we must have walked nearly two miles before the first was captured. This was *Drusilla phorcas*, Westw., a low-flying but most conspicuous black-and-white species. Species of *Danais* and *Euplaea* were the next to appear; and then, whenever we passed any open spots, Lyceuidæ of various kinds became rather numerous; but altogether Butterflies could not be called abundant in this shady forest. A great many more were seen than captured, for every now and then a large *Papilio* dashed across the path, and was lost in the forest before one had time to make a stroke at it. Overhead cockatoos and parrots were screaming, and pigeons and doves cooing among the branches; but the trees were so lofty, and the leaves so thick, that it was almost impossible to see them, and only one of the latter was obtained.

Upon nearing the village, about noon, our guides set up a great shouting to apprise the inhabitants of our approach, and upon entering it we were surrounded by a crowd of naked savages, who seemed to be very pleased to see us. We walked through the village and examined the various huts, which were very well constructed, and were much better built than those we had previously met with at the New Hebrides. After seeing all there was to be seen, we sat down in the shade of one of the huts and discussed our lunch, the natives boiling our solitary pigeon and some yams which they gave us, and very good they were.

After lunch I strolled about the clearings near the village, followed by a crowd of natives, who were much interested in my proceedings, and soon began to take an active part in the sport, and it was amusing to see them running madly after Butterflies with small bushes in their hands, with which they made frantic efforts to knock them down. Of course they very often succeeded, for they were extremely nimble, and then the broken fragments were brought to me in triumph, and I had to pretend to be much pleased. Butterflies were fairly numerous in these clearings, and I captured among others several of the fine *Papilio erskinei* described further on. After the others had had an hour's rest, we started back and got on board again about six o'clock, pretty tired with our day's excursion, for in some places it was most fatiguing, especially up-hill, where the path frequently took us over slippery soap-stones, which made walking very difficult and unpleasant.

We left Ugi the following day, and after stopping for a few hours off Tesemboko in the island of Guadalcanar, proceeded to the Duke of York Islands.

Our next visit to the Solomon Islands was in September 1883, when we stayed for three days in Blanche Harbour, Treasury Island, at the entrance of the Bougainville Straits. The harbour is a very beautiful one, being almost landlocked by other small islands, all of which are hilly and densely wooded. Unfortunately it rained nearly the whole time we were there; but during the intervals of fine weather, when I was able to get on shore, I could not go very far, as I was only just recovering from a severe attack of fever, and was too

weak for much exertion. My hunting-ground was therefore confined to a slope on the hillside at the back of the native village, which had recently been cleared for yam-planting. Here Butterflies were more numerous than at Ugi; and if the weather had been more favourable, and I had been able to get about more, I believe I should have taken a large number. As it was I secured examples of several new species, *Papilio bridgei* being among them. The most plentiful were a *Precis* near *P. ada*, but very different to the Ugi form, *Hypolimnas alimena*, very fine, and several species of *Euplexa*. *Danais archippus* was not seen at all in this place, although it was so common at Ugi; perhaps its migration had not yet extended so far in a north-westerly direction.

From the little I have seen of the Solomon Islands, I feel quite convinced that when they are properly worked they will yield a large number of new and interesting Rhopalocera, and I hope on a future occasion to be able to describe some more new species.

#### ARGYRONYPHA, n. gen.

Head moderately large, hairy between the eyes; eyes rather prominent, smooth; antennæ long, slender, extending to beyond two thirds of costa, with a long, gradually-thickened club: palpi conspicuous, pea-green, porrect, ascendant, clothed outwardly at their base with fine short white hairs, the hairs less numerous towards the tip and dark grey; tip black, finely pointed: thorax rather short: abdomen almost as long as hind wings, slender, pinched in at base, and with a brush-like tuft of hairs at base of genital organs in male. Fore wings rather long and narrow in male, broader in female; costa moderately arched, convex at base; apex somewhat acute in male, truncated in female; hind margin entire, oblique; inner margin straight, hairy to beyond the middle; anal angle slightly obtuse; nervures of fore wings dilated at base; cell narrow, rather long; first subcostal nervule emitted just before end of cell; discocellular nervules pointing outwards; median nervure and first discocellular nervule forming a moderately acute angle. Hind wings: costa elbowed at base, very slightly concave at one third, and rounded off at apex; hind margin very moderately sinuate; inner margin slightly grooved. First pair of legs imperfect, rather pubescent, pale green; second and third pairs long, slender, smooth.

This interesting genus does not appear to come very near any yet described, but bears some relationship to *Hypocysta*, Westw., and *Nissanga*, Moore.

These beautiful little Butterflies were local in their habits and of retiring disposition, frequenting shady spots in the dense forest. When disturbed, they flew but a short distance and settled upon the leaf of some low shrub, always on its upper surface. They were rather restless, and generally walked several times round the margin of the leaf, and then flitted off to the next. While so engaged their wings were kept erect, and the bright metallic spots and stripes made them very conspicuous.

## ARGYRONYMPHA UGIENSIS, n. sp. (Plate XXXIV. fig. 3.)

*Male and female.*—*Upperside* orange-red: *primaries* with a black marginal border extending on costa from end of cell to rather beyond middle of inner margin; border very broad at apex, constricted and narrowest at second median nervule, widening out again at first median nervule: *secondaries*, costa blackish brown, base and margins broadly clouded with dusky, and with some indistinct dusky markings across disk; a black and rather indistinct submarginal line widening out between subcostal nervules into a linear-shaped blotch; all the nervules dusky. *Underside*: *primaries* orange-red, not quite so bright as upperside; a submarginal silvery stripe bordered outwardly by a narrow very dark fuscous line; a short oblique silver stripe extends from inner margin near hinder angle to halfway between first and second median nervules, and with its apex almost touching the submarginal stripe: *secondaries*, basal half greyish ochreous, thickly irrorated with minute black dots; an oblique reddish-brown stripe from near costa crosses the wing, and encloses upper part of cell and terminates near anal angle; this is bordered outwardly by a curved or double crescent-shaped silvery band, which is again bordered by a pale ochreous-yellow band; a narrow submarginal line of silver bordered outwardly by reddish ochreous, and inwardly, from submedian nervure to discoidal nervule, by reddish brown; between the discoidal nervule and first subcostal nervule there are four jet-black and somewhat square-shaped spots, with their bases resting on the submarginal line; between first and second subcostal nervules are two additional black spots, above the others, the space between them, which is ochreous, forming a complete St. George's Cross, and the whole inwardly bordered by a silvery band; between submedian nervure and two median nervules a silvery horseshoe-mark bordered outwardly and inwardly by reddish brown; all the wings margined by a line of dark reddish brown. The silvery markings have opalescent tints in various lights.

Exp. 42 millim.

*Hab.* Ugi, Solomon Islands.

## ARGYRONYMPHA PULCHRA, n. sp. (Plate XXXIV. fig. 4.)

*Male and female.*—*Upperside* dark brown; basal third of fore wings reddish brown. *Underside*: *primaries*, basal portion, including cell and a little beyond on costa and inner margin, grey, thickly irrorated with minute black dots; a silvery submarginal band from rather before apex on costa to hinder angle, where it forms an elbow and turns back and runs parallel to itself as far as third median nervule, this is bordered inwardly by dark chestnut; a pale yellowish stripe from near apex to first median nervule, its lower half between the silver bands; beyond this to grey part of wing a broad band of chestnut: *secondaries*, basal part, including half of cell to near anal angle, grey, thickly irrorated with minute black dots; beyond this a band of chestnut from inner margin two thirds across wing towards anal angle; this is bordered outwardly by an elbowed stripe of silver

which is continued round by anal angle, forming a submarginal stripe, to apex, whence it forms a curve as far as discoidal nervure; a silver  $\Lambda$ -shaped mark between second median and discoidal nervule, the bases nearly resting on submarginal stripe; a suberescens-shaped silver stripe near anal angle divided by first median nervule; four small square black confluent spots just above submarginal stripe, between discoidal and second subcostal nervules; above these, two ochreous lunules bordered above, as far as outer edge of silvery curved band, by a large black irregularly-shaped blotch; space between arms of  $\Lambda$ -shaped mark, and inner edge of submarginal stripe between second median nervule and submedian nervure, deep chestnut; a large black lunular spot between first and second median nervules, its inner edge touching the suberescens-shaped silver stripe. Thorax reddish brown; some bluish-green hairs on collar and between eyes; eyes dark reddish brown, bright red when the insect is alive.

Exp. 39 millim.

*Hab.* Treasury Island, Solomon Islands.

**PAPILIO XENOPHILUS, n. sp.**

*Male.*—*Upperside* dark brown: *primaries*—a straw-coloured transverse marginal band slightly curved inwards towards the apex, straight on the outer edge and nearly parallel with hind margin, rather clouded on inner edge; *nervures* crossing band dark brown and clouded at their edges: *secondaries* tailed, scolloped; a straw-coloured transverse and somewhat outwardly dentated band from costa, near apex, to inner margin just above anal spot; anal spot indistinct, composed above of blue and below of pinkish-yellow atoms; indentations whitish. *Underside*: *primaries*, same as above but band paler: *secondaries*, no band, but instead a series of seven whitish-yellow spots, the three near anal angle and one at apex near costa small and indistinct, the other three large and oblong-oval; beyond these spots patches of bluish atoms; a marginal row of indistinct orange-yellow spots, above each of which is a cloudy pyriform blotch; an orange-yellow spot at anal angle, bordered above by a few blue atoms.

Exp. 110 millim.

*Hab.* Ugi, Solomon Islands.

This species comes near *P. capaneus*, Westw., but differs in having the bands right across the wings, and in the markings of the underside.

**PAPILIO ERSKINEI, n. sp.** (Plate XXXIV. fig. 1.)

*Male.*—*Upperside* greenish black: *primaries* with a marginal band of eight large creamy-yellow spots curved inwards at the apex, extending from subcostal to submedian nervure, and with indications of another spot between submedian nervure and inner margin, and a short dash of the same colour between the subcostal nervure and costa, and just above the subcostal spot; base of cell dusted with a

few minute yellowish atoms: *secondaries* not tailed, margins scoloped; a broad transverse outwardly-sinuately greenish creamy-white fascia, its inner margin touching, but not extending into, discoidal cell; a conspicuous orange-red oval spot at anal angle. *Underside* black: *primaries* with four white apical spots, and a whitish streak at base of cell: *secondaries* with a row of seven orange-red marginal spots, the one at anal angle being much the largest, and above these a series of six lunules composed of pale-bluish atoms; indentations pale yellowish.

Exp. 144 millim.

*Hab.* Ugi, Solomon Islands.

This fine Butterfly belongs to the *Erectheus* group. It was tolerably common at Ugi in June 1883, but difficult to catch on account of its powerful flight, and its habit of keeping in the thick forest, where it could not be easily followed. I saw several of what I believe were the females of this insect; they were much larger than the males, of a dark brown, and with more white across the wings.

I have named this species in honour of Admiral James E. Erskine, who commanded the Australian Squadron at the time I was on the Station.

PAPILIO BRIDGEI, n. sp. (Plate XXXIV. fig. 2.)

*Male*.—*Upperside* deep black, appearing greenish black in certain lights: *primaries*, a marginal band of eight somewhat square-shaped pale greenish-white spots curved inwards at the apex, the apical spots being small and indistinct; base of cell and apex dusted with a few whitish atoms: *secondaries* not tailed, scoloped; a broad transverse outwardly-dentated pale greenish-white fascia, its inner margin enclosing lower part of cell, and its upper portion running between costa and subcostal nervure nearly to base. *Underside* black: *primaries*, subcostal nervure inwardly bordered by a narrow whitish streak from base to near middle of cell; a few whitish atoms at apex: *secondaries*, a marginal row of seven pale pinkish-orange spots, the three nearest the apex small and obscure, the one at anal angle large and nearly square-shaped; above these a row of seven ill-defined lunules of pale-bluish atoms, the one at apex nearly obsolete; indentations conspicuous, white, crescent-shaped.

Exp. 118 millim.

*Hab.* Treasury Island, Solomon Islands.

This is another fine species, and also belongs to the *Erectheus* group. It was not uncommon, but, like *P. erskinei*, frequented the thick forest and was difficult to capture. I only obtained one, a very perfect example. I saw a larger insect, of a dark brownish-black hue and with larger spots and fascia, which was probably the female of this.

I have named this species in honour of Captain Cyprian A. G. Bridge, who commanded H.M. ship 'Espieggle' during her long and interesting Commission of nearly four years, a great portion of which time was spent among the islands of the Western Pacific.

## PAPILIO HICETAON, n. sp.

*Male*.—*Upperside* deep olive-brown: *primaries*, an oblique row of nine spots from apex to inner margin, the spot contiguous to inner margin greenish yellow, the remainder paler; a submarginal row of five small pale-yellow spots between subcostal, discoidal, and first and second median nervules; two small spots outside upper end of cell, and another larger spot beyond, near the apex; the cell contains six spots and streaks, at the base a long oblique streak pointing towards the apex, next a minute perpendicular dash, this is followed by two narrow subrescent-shaped spots near subcostal nervure, and at end of cell two spots, the upper irregular in shape, the lower oval, all these spots yellow with the exception of basal streak which is pale green: *secondaries*, basal half light brown, dotted with golden-brown atoms, the rest deep velvety brown, the nervules paler; a small suboval and slightly raised patch of scales at upper end of cell; inner margin and base thickly clothed with fine golden-brown hairs. *Underside*: *primaries*, same as above, but spots paler, and row of submarginal spots extends to inner margin; a small crimson streak at base: *secondaries*, a large and somewhat square-shaped pale-green spot at base, bisected by subcostal nervure and bordered outwardly by black and crimson; an opalescent lunule with dusky pupil at upper end of cell; a discal band of dusky lunules, bordered below with some metallic-blue atoms, the lunule at anal angle edged above with crimson atoms; apex with marginal patches of opalescent atoms; fringes reddish.

The primaries are narrow, and the costa is much arched.

Exp. 100 millim.

*Hab.* Ugi, Solomon Islands.

Near *P. browni*, but quite distinct.

## EXPLANATION OF PLATE XXXIV.

Fig. 1. *Papilio erskinei*, ♀, p. 348.

2. — *bridgei*, ♀, p. 349.

3. *Argyrolympha ugiensis*, ♂, p. 347.

4. — *pulchra*, ♀, p. 347.

6. Notes on some Birds from Perak. By R. BOWDLER SHARPE, F.L.S., F.Z.S., &c., Zoological Department, British Museum.

[Received June 15, 1886.]

Thanks to the exertions of Mr. Davison, who explored the western side of the Malayan peninsula, we have a tolerably complete list of the birds of this portion of the Indian Region, and a list of his collections has been given by Mr. Hume ('Stray Feathers,' 1879, pp. 37, 151). The series of Malayan birds in the Hume Collection, now in the British Museum, is an extremely valuable one, and it is





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4

W. Purkiss lith.

Hanhart imp.